

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing Of Claims:**

1.-10. (Canceled)

11. (New) A method for reconstruction of an angle signal from a sensor signal of a rotation angle sensor having a periodic characteristic curve featuring a plurality of segments between which characteristic curve jumps occur, comprising:

- determining positive and negative signal jumps in the sensor signal;
- generating a segment value after a signal jump has been determined, wherein the segment value specifies in which segment a currently measured rotation angle is located; and
- reconstructing the angle signal from the sensor signal and the segment value.

12. (New) The method as recited in Claim 11, wherein the positive and negative signal jumps are determined by threshold monitoring of a rate of change of the sensor signal.

13. (New) The method as recited in Claim 11, further comprising:  
one of incrementing and decrementing the segment value when one of a positive signal jump and a negative signal jump is detected.

14. (New) The method as recited in Claim 11, further comprising:  
adding to the sensor signal an angle that is a function of the segment value and a segment width.

15. (New) The method as recited in Claim 11, further comprising:  
correcting an offset of the reconstructed angle signal..

16. (New) A rotation angle sensor system, comprising:
  - a rotation angle sensor having a measuring range including only one partial range of a total measuring range, the rotation angle sensor having a periodic characteristic curve featuring a plurality of segments between which characteristic curve jumps occur; and
  - an analyzer unit, wherein:
    - the analyzer unit detects positive and negative signal jumps in a sensor signal,
    - the analyzer unit determines a new segment value after an occurrence of one of a positive signal jump and a negative signal jump, and
    - the analyzer unit reconstructs an unambiguous angle signal from the sensor signal and the segment value.
17. (New) The rotation angle sensor system as recited in claim 16, wherein the analyzer unit monitors a sensor signal threshold value to detect positive and negative signal jumps.
18. (New) The rotation angle sensor system as recited in Claim 16, wherein the analyzer unit includes a segment counter that is one of incremented and decremented when one of the positive signal jump and the negative signal jump is detected.
19. (New) The rotation angle sensor system as recited in Claim 16, wherein the analyzer unit adds to the sensor signal an angle that is a function of the segment value and a segment width.
20. (New) The rotation angle sensor system as recited in Claim 16, further comprising:
  - an arrangement for detecting an offset when the rotation angle sensor system is initialized.